

PROSPECTUS



Prospectus Supplement
(to Prospectus dated September 13, 2007)

This Prospectus Supplement supplements and amends the prospectus dated September 13, 2007, relating to the sale of up to 3,247,370 shares of our common stock, or interests therein, by certain selling stockholders.

This Prospectus Supplement includes the attached Current Report on Form 8-K dated September 21, 2007, we filed with the U.S. Securities and Exchange Commission.

This Prospectus Supplement should be read in conjunction with, and delivered with, the Prospectus and is qualified by reference to the Prospectus except to the extent that the information in this Prospectus Supplement updates or supersedes the information contained in the Prospectus.

Our common stock is listed on the NASDAQ Global Market under the symbol "OCLS." On September 20, 2007, the last reported sale price for our common stock on the NASDAQ Global Market was \$6.25 per share.

Investing in our common stock involves a high degree of risk. Before buying any shares, you should carefully consider the risk factors described in "Risk Factors" beginning on page 5 of the Prospectus.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The date of this Prospectus Supplement is September 21, 2007

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549**

FORM 8-K

**CURRENT REPORT
Pursuant to Section 13 or 15(d) of the
Securities Exchange Act of 1934**

**Date of Report: September 21, 2007
(Date of earliest event reported)**

OCULUS INNOVATIVE SCIENCES, INC.

(Exact name of registrant as specified in its charter)

Delaware

(State or Other Jurisdiction
of Incorporation)

001-33216

(Commission File Number)

68-0423298

(I.R.S. Employer
Identification Number)

**1129 N. McDowell Blvd.
Petaluma, California**

(Address of principal executive offices)

94954

(Zip Code)

(707) 782-0792

(Registrant's telephone number, including area code)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
 - Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
 - Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
 - Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))
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ITEM 8.01 Other Events.

Oculus Innovative Sciences, Inc. (the "Company") is providing updated information regarding the status of the Company's ongoing randomized Phase II clinical trial on mildly infected diabetes foot ulcers. The trial is designed to evaluate the effectiveness of Microcyn in mildly infected diabetic foot ulcers with endpoints of resolution of all symptoms of infection, or clinical cure, and improvement in signs and symptoms of infection supported by microbiological responses as described in guidelines of the Food and Drug Administration (the "FDA"). Enrollment for the Phase II trial has not yet been completed and is expected to be completed during the fourth calendar quarter of 2007. As of September 17, 2007, the Company had enrolled 42 patients in the trial. The Company expects to complete the enrollment of a total of 60 patients during the fourth quarter. The Company had expected to complete the trials and announce the results during the fall of 2007. It believes that enrollment is taking longer than expected because mildly infected diabetic foot ulcers are often treated by general practitioners, rather than the specialists at the clinics participating in the trial. The Company has not been notified by any of the sites that it is unethical to continue to treat patients with any of the three arms of the trial or of any serious adverse events that would require the Company to notify the FDA. The Company intends to remain blind to the results of the trial until it is completed.

The Company is enrolling patients for this trial at 16 sites. It currently expects to complete enrollment of patients in the Phase II trial in the fourth quarter of 2007 and to announce the data from the trial in the first quarter of 2008. Thereafter, the Company anticipates having meetings with the FDA to discuss the results of the trial. Assuming the Phase II trial is successful, the Company expects to have a second meeting with the FDA to discuss the protocols for two Phase III clinical trials.

In addition, the Company has begun enrolling and randomizing patients in a diabetic foot ulcer trial and a burn trial being conducted in China through China Bao Tai, the Company's contract partner in China. These trials are designed to evaluate the effectiveness of Microcyn in diabetic foot ulcers and burns. To date, 120 patients have been enrolled in the trials, and there may be as many as 200 patients enrolled prior to completion of the trials. The Company expects to obtain the results from these trials as early as this fall. If the results are successful and regulatory approval is obtained from the Chinese regulatory body, the Company's wound care product, Dermacyn, will be available for purchase in China.

This report contains certain statements that may include forward-looking statements within the meaning of the Safe Harbor provisions of the Private Securities Litigation Reform Act of 1995, including the ability to enroll any specified number of patients in our clinical trials within a specific time frame, if at all; our ability to complete our clinical trials in any specific time frame, if at all; our ability to obtain necessary clearances in any particular time frame, or at all; the success of our Phase II trial to evaluate the safety and efficacy of our technology; the ability to develop a protocol for our Phase III trials that is acceptable to the FDA; the ability of our products to prevent and treat infections in chronic and acute wounds; our hope that results outside the United States can be replicated inside the United States; our intent to pursue and obtain additional partnerships, validate our technology and accelerate the commercialization of our product pipeline; the ability to achieve specified revenues; and our ability to obtain additional financing on terms acceptable to us, if at all. These forward-looking statements are identified by the use of words such as "will" "should," "could," "may," "intend," "expect," "anticipate," "predict," "hope" and "believe," among others. Forward-looking statements are subject to certain risks and uncertainties that could cause actual results to differ materially, including risks inherent in the development and commercialization of potential products, the risk that clinical studies or trials will not proceed as anticipated or may not be successful or sufficient to meet regulatory standards or receipt of required regulatory clearances or approvals, the Company's future capital needs, and its ability to obtain additional funding, and other risks detailed from time to time in the Company's filings with the Securities and Exchange Commission including the quarterly report on Form 10-Q for the quarter ended June 30, 2007. We disclaim any obligation to update these forward-looking statements.

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

Dated: September 21, 2007

OCULUS INNOVATIVE SCIENCES, INC.

By: /s/ Robert Miller

Robert Miller
Chief Financial Officer
(title)